CLAIMS:

1. An activity monitor comprising:

a measurement unit including a plurality of motion sensors for producing respective sensor signals indicative of motion experienced thereby; and

a processor operable to receive the sensor signals from the measurement unit, and to process the sensor signals in accordance with a predetermined method,

characterized in that the processor is operable to process the sensor signals as respective vector components to produce a resultant vector.

2. An activity monitor as claimed in claim 1, wherein the motion sensors are accelerometers.

3. An activity monitor as claimed in claim 1 or 2, wherein the motion sensors are arranged to be mutually orthogonal.

4. An activity monitor as claimed in claim 3, wherein the processor is operable to calculate the magnitude of the resultant vector according to the following expression:

$a=\sqrt{(a_x^2 + a_y^2 + a_z^2)}$, where a is the magnitude of the resultant vector, a_x, a_y and a_z are respective sensor signals.

5. An activity monitor as claimed in claim 4, wherein values of a are stored in a lookup table.

6. An activity monitor as claimed in claim 4, wherein the processor is operable to calculate the direction of the resultant vector.

7. A method of monitoring activity using a plurality of motion sensors which are operable to produce respective sensor signals indicative of motion experienced thereby, the method comprising receiving sensor signals and processing the signals in accordance with a

predetermined method, characterized in that the sensor signals are processed as respective vector components to produce a resultant vector.

8. A method as claimed in claim 7, wherein the magnitude of the resultant vector according to the following expression:

$a=\sqrt{(a_x^2 + a_y^2 + a_z^2)}$, where a is the magnitude of the resultant vector, a_x, a_y and a_z are respective sensor signal.

9. A method as claimed in claim 7 or 8, comprising calculating and storing the direction of the resultant vector.